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ORIGINAL COMMUNICATIONS.

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CLASS HISTORY.

BY MRS. DR. MARY H. WHITNEY.

[Read at the Commencement Exercises of the California Medical College.]

THE casual observer hardly realizes the value of history to the world. Can one imagine the condition of the race, were the sun blotted out, the light of the moon and stars withdrawn? Scarcely less in darkness would be the mind, and scarcely stronger the intellect, had we not the beacon-lights of history for our guide. The nations most thorough in research produce the greatest writers and are first in the world's progress.

Of what moment would be the oratory of Cicero and Cæsar, the deeds of Napoleon, the teachings of Plato, or the sacrifice of Socrates, did not the pen, mightier than the sword, indelibly imprint upon the annals of fame the words which are influencing hearts and molding lives so many years after the bodies of their authors are crumbled into dust! And so, in our ambition, in the sowing-time of our lives, we would imitate the example of these great men and aspire to preserve, for the benefit and encouragement of those who shall come after us, the tale of our struggles, failures, and triumphs, deeds of valor, battles hard fought and dearly won, brilliant achievement and dire disaster; and we think that even Don Quixote (whose representative is with us to cheer and support), has not left a more brilliant record.

We are a class gathered from the four quarters of the globe. We met strangers to one another, and for a time each appeared as the dignified student whose thoughts were freighted with momentous burdens of life and death, and whose actions were enveloped in a halo of scientific mystery most wonderful to behold. We were searching in the well of knowledge for the pearl of wisdom and the diamond of truth, and life seemed too short to spend a moment in the more frivolous occupations common to the human family. So we seemed, but, alas! human nature is the same wherever found, and medical students form no exception to the rule. The descent was easy though gradual, from the pinnacle of excellence and sobriety to which we were exalted, until now we stand together, with each leaf in the book of our character unfolded and re-read by each, till we can almost with certainty predict the future destiny that shall befall our fellow-students. In these years of labor, hearts have grown dear and friendships been formed that shall never fade, and whatever the happiness that comes to our later years, it will in no wise dim the lustre of our class memories. When we started upon our pilgrimage the way seemed long and often clouds of darkness enveloped us; but, thanks to our patient instructors, we persevered, and though a few dropped out by the wayside, we passed cheerily along, enjoying the freedom of juniors, and preparing for the more exciting time that was to come to us.

On the evening of November 6, 1882, the great hall in the California Medical College was brilliantly illuminated and lights shone round on fair women and brave men. The brilliant scene marked the opening of the college year of 1882-83, and the auspicious occasion of our promotion to the rank of Seniors. Distinguished upon the platform sat our Dean, his genial countenance reflecting the pleasure all felt in being together once again. Beside him were his learned co-laborers, amongst whom we discovered a new face, Professor Webster, who had recently arrived to take the Chair of Materia Medica. Of course he was an object of peculiar interest to us, but his intelligent, earnest face and pleasant manner led us at once to a favorable opinion, which further acquaintance more than verified. The evening passed pleasantly, and the next morning found thirty students seated in the lecture-room. There were new faces, but we turned with most interest to the old friends; those

with whom we had plodded our way through many months of labor, and with whom we were to march in rank until this final evening. Our progress has been slow but sure. We passed triumphantly through the soul-harrowing periods of term examinations, and did not succumb even when Professor Crowley suggested the appropriateness of foolscap paper for our use. Our vacations have been spent in a happy combination of business and recreation, most valuable acquisitions were gained at beds of sickness, and more extensive study given the subjects than time permitted in our college life. The reassemblings were times of pleasure and happiness, each laden with rich sheaves of experience garnered during the separation, to be now devoted to the common weal.

During our probation many pleasant incidents have occurred to enliven the monotonous hours of close application. Our Eclectic Quiz Association, of which we enjoy the honor of being founders, has been a most pleasurable source of information, and promises to become a most flourishing and useful auxiliary to our college.

Professor Webster has devoted many evenings to drilling us in the use of electro-therapeutics, till we feel ourselves very proficient, and shall assail our first case with perhaps more ardor than we shall later ones. But this Professor of ours so detailed to us the virtues of Calcara Carb, that our worthy druggist became, indeed, an object of commiseration in his efforts to keep us supplied with the precious drug. Telegram after telegram sped over the wires for more Calcara Carb, for the students of the California Medical College, till the very oysters trembled in their watery beds with fear for the extermination of their race.

Professor Cornwall, too, has given us extra time, and insisted that we should be able to thread the mazy labyrinth, or treat with dexterity a case of dacryocystoblennorrhoea.

In surgery, thanks to Professor Crowley's unexcelled method of teaching, we consider ourselves quite perfect, and often find creeping into our hearts the thought that we shall never need to call counsel in any case.

In spite of Professor Herzstein taking us down into the capillaries of microscopical physiology, we came off conquerors, and he assures us he is very proud of the result.

Professor Bixby has proven to us his devotion by the

extra care we have been to him, and whenever he was detained during his lecture we were sure to receive the telegram signifying an evening lecture; and though we never justly appreciated his magnanimity, our displeasure always melted under his genial coming, and we would study for the more perfect standing in his chair.

Professor Campbell gave us his blessing last year and passed us from his chair saying we were the most perfect class he had examined in this college. We were so gratified we immediately passed a resolution to employ him in all our divorce cases.

In Prof. McLean's most important chair we leave a bright record, for his delight in closely-marked examinations is quite overbalanced by his plain manner of teaching, and we shall long remember his abundant quotations from Scripture and his admiration for Shakespeare. In chemistry we searched mixture after mixture, testing for unknown substances, and considered ourselves extremely practical till Professor Meads showed us that the atmosphere of our room contained fifteen cubic centimeters of carbonic oxide to the thousand parts of air, whereupon we wept, and opened the windows. Professor Logan was kind to us, always telling us when he foresaw an explosion, and thoroughly taught us how to prevent those appalling disasters. Under Professor Gere's explicit guidance we have become experts in tracing the course of arteries, and are perfectly at home amongst the four hundred muscles of the body. He considers us a most interesting class, whose ability to ask questions and forget hard names is truly astonishing. One of our leading characteristics is harmony, as was illustrated by the unanimous selection of Dr. Cassity for our valedictorian. He is the brightest ornament of the class, a famous chemist and a favorite with young ladies; but he is impressed that marriage belongs to the class of delusions so graphically reviewed in the jurisprudence chair, and seems loth to enter a state "out of which he cannot be reasoned." The Professor expects him some day to become a brilliant expert in the courts of justice. He will return to his home in Merced laden with honors and knowledge, and ere many years we shall probably hear his name connected with deeds of which we now see full promise.

But not all of us are young in the practice of medicine. Several are far advanced in experience as well as theory.

The patriarch of our class, Dr. Higgins, counts amongst the blessings which crown his venerable head the possession of two diplomas besides the one which to night rewards his indomitable labor. And his most desirable accomplishment in phonography has often given him such an advantage over the rest of us that we were glad to consult him in regard to notes.

Our knight of the dental forceps and editor of the *Dental, Jairus*, Dr. Thrailkill, was born during the present century, in that fertile portion of country bounded by the Mississippi on the west, Ohio on the south, on the north the great lakes and Canada, and the Atlantic on the east. Amidst such august scenes are poets born and reared. By referring to your text-books you will find that this vast region is celebrated for its bountiful production of corn, wheat, potatoes, and great men, who are noted not only for their capacious intellects, but, also, for their beauty, grace, strength, and stature, like our Thrailkill. He is distinguished for his thorough knowledge of Latin and Greek, and other languages, dead and dying. He has also given us a physiological elucidation of the phenomenon of dextral pre-eminence. His progress in the art of sneezing is far in advance of the age, and will be of the utmost value in reviving his patients.

Our "Gapy dear," remarkable for being the first young lady graduate of the college; how much we shall miss her! So self-denying, and ready to do for all. During our long course her bright smile has never deserted her, and in our perplexities we have sought her side, sure of sympathy and assistance. We are only afraid the world will be deprived of her services through the agency of some gentleman who will permanently engage them for himself. We shall never forget her, and wish her the happiness through life that she ever imparts to others.

Dignified Dr. Bronson has lost a portion of his dignity since coming amongst us, the result, he says, of association. He retains, however, sufficient to insure him the regard of all good people. The absorbing object of his affection is his nice Faradic battery. Night and day he bestows upon it a mother's care and devotion, and we predict for him a brilliant success in its use in accordance with the study he is giving it.

Our oldest inhabitant, indeed, I believe he is indigenous

is one of those valuable articles that come in small packages. Ancient authorities describe him as possessing a clerical appearance, and the appropriately short name of Rand. He has filled faithfully for us the chair of Quiz-master on Surgery, and with fatherly care has smoothed the rough places, strengthening our weak points, and averting many a downfall. Although amongst the highest in the class, he wavers in the choice between the permanent steadfastness of a surgeon's life, and the ephemeral brightness of a political destiny. In either he will win success through his inherent manhood. But we are sure our youthful disciple of Esculapius will never desert his anatomical studies.

Among the lights of the class of '83 shines benignly our wit, Dr. Scott, from the sunny skies of Minnesota, a faithful, devoted student, who, through all his struggles with *Blepharitis Marginalis*, and *Otitis Media Catarrhalis Chronica*, preserves the most perfect equilibrium of temper, and from the depths of woe gave forth bursts of dry humor which never failed to find response in our bosom. Dr. Scott, you shall ever hold a warm place in our memories. We accept your example and forgive the jokes and puns perpetrated upon our panophthalmic pannus.

Our most gentlemanly and estimable Dr. Cassels, of Knight's Landing, enforces the principle that doctors will never take their own prescriptions by always lunching on candy. He has distinguished himself while with us by his pleasantly quiet manner, and his perfect lessons. He bears upon his countenance the stamp of an eastern nativity; is a graduate from an eastern college, and enjoys, with others of the class, the advantage of experimental knowledge of Therapeutics and Surgery. He did not acknowledge being the author and instigator of our erratic remembrances on St. Valentine's Day, but we know no one but a Senior could have selected and assigned characteristics so suitably. Mr. Gray himself could not more perfectly have represented Rand's skeleton, dried, bleached, and in a glass case, while Dr. Scott's pills are simply immense. Friend Cassels, don't leave yourself without any Valentine next time, and then we will be deceived and think you did not do the bad deed.

Our friend, Dr. Harding, of Suisun, is well known to all as a dentist, physician, philosopher, etc. He is filled to overflowing with humorous stories, ready with a song, and can be coaxed into a dance. He has brightened many of

the darkest days by his sallies of wit interspersed amidst the sober thoughts of reality. His ruling passion—inventing instruments of dental torture—and a deformed tooth is to him a thing of beauty. He belongs to our list who have knowledge through experience, having practiced the healing art for a period of fifteen years, and then abandoning it for the specialty so dear to his heart. If, as he resumes his former labors, he is as successful as in those he is about to drop, his patrons may feel assured of the extreme longevity of their existence.

Sedate Dr. Metcalf, the most studious and attentive of us all, deserves all praise and commendation. In every heart she holds the place of friend, and many good wishes follow her as she goes from us.

Of the representative from Pennsylvania, bound for Washington Territory, little need be said. Her faults are better known to herself than to others, and her virtues are best left for you to discover.

And so we have passed the allotted time of doctors within the sacred walls of learning. We have striven to walk in the straight and narrow way that leads to fame and a diploma; and found to our grief that few are they who walk therein; for broad is the road that leadeth through the back door, and easy it is to pass thereout. Mutually our sorrows and our joys have been borne, but against him, guilty of an anatomical error in class, it entered not into the heart of man to restrain his laughter. For the class we claim no angelic perfection, but we take pride in its many virtues, its high aims and zealous application.

But now we reach a period when we discover that even the heart of a surgeon may possess a tender chord—a pathological condition, surely, you may say; an epidemic, however, I answer. Though “parting is such sweet sorrow,” we pass rapidly over it. Having fulfilled the requirements of our austere sympathizing Professors, we pass from under their guidance with regret.

Companionships, associations, friendships, are to be ruthlessly torn asunder. But with these emotions of sorrow, others deep, vague, and unutterable are commingled. A desire to hasten to the work for which we have prepared; a strange sense of responsibility and care to be assumed; a deep yearning after further knowledge, and beliefs that by conscientiously observing these monitors, and building

steadily upon the foundation laid by our esteemed Professors we shall accomplish a work that at the end will have made life worth the living.

“Over and over again,
No matter which way we turn,
We always find in the Book of Life
Some lesson we have to learn.
We must take our turn at the mill,
We must grind out the golden grain,
We must work at our task with a resolute will,
Over and over again.”

DEEP ABSCESSES.

BY A. J. HOWE, M. D.

A HEAVY man received an abrasion of the ankle in warm weather, and the injury was succeeded by an erysipelatous manifestation which was ushered in with a chill. His physician treated the case for several days, and at length called me into consultation. I found the limb sensitive and swollen, and a center of inflammatory action in Scarpas triangle. From the length of time the inflammation had existed, and from its high grade, as well as from contingent circumstances, I suspected the existence of pus in the deeper recesses of the upper part of the thigh, though nothing like “pointing” could be discovered. The patient was in great pain, restless, irritable, and querulous, and demanded that something be done at once for his relief. I gave him the opinion that a purulent collection existed in the deeper parts of his great thigh, and that I could reach it with an exploring needle. He replied, “Go ahead,” and I proceeded to operate. I sent a long aspirating needle into the thigh keeping far enough within the median line to escape the femoral vessels. The implement was just six inches long, and I sent it to its shoulder or head. The sensation imparted to the fingers was that the point entered a cavity, and upon withdrawing it, and blowing through its hollow, a drop of pus appeared on its point. This was the *experimentum crucis*, the test that purulency existed where it had been suspected to be. A slender bistoury was then used to enlarge the puncture into an incision; and when the purulent cavity was reached, the pus poured forth as if under the influence of great pressure. Several ounces were discharged. In a few days the man was on his feet.

Another man had an inflammatory swelling in the popliteal space. Aneurism was suspected, as well as other morbid statis. Poultices were employed "to bring the thing to a head," yet the swelling remained about the same. At a period of doubt and uncertainty in the case, I was invited to consult with the medical attendants. My view was that we should explore for pus; and I proceeded to insert an aspirating needle into the outer side of the tumor, sending the implement to the bone between the condyles. I carried the needle so as to avoid the popliteal vessels. Upon withdrawing the instrument a "show" of pus was on its point. This completed the diagnosis; and with a straight and sharp pointed bistoury I followed the course the needle had taken and came upon a collection of pus. The evacuation of the fluid was succeeded by pronounced relief, and favorable convalescence. The cause for the formation of this deep-seated abscess could not be conjectured. Possibly an obstructed lymphatic had started the inflammatory action.

A young woman experienced pain in the lumbar region, and became prostrated with general fever. A locally manifested inflammation could be seen where the lower rib articulates with the body of the twelfth dorsal vertebra. The region had been linimented, blistered, and poulticed, yet neither relief nor satisfaction was obtained. In the dilemma I was summoned into consultation, and upon examining the case and learning its history, I suspected abscess of the kidneys. To confirm my opinion I sent an exploring needle just below the lower rib, and in the direction of the kidney; and so great was the pressure of the purulent fluid that a few drops of it were forced through the hollow of the implement. Upon the withdrawal of the needle I used a bistoury to enlarge the aperture. There was no trouble in finding the purulent cavity, and in evacuating its contents. In the course of a week a urinary calculus as large as a small pea found its way through the aperture I had made. Directly afterwards the patient began to mend, and in two months was well. Query: Could this be called a case of nephrectomy? I think not.

An elderly woman of large proportions had a severe and prolonged pain in the median line of the abdomen, at a point two inches above the umbilicus. In the vicinity of the spot there was evidence of inflammatory exudation, with a "center" or place of predetermined "pointing," yet the

purulent cavity, if any existed, must have been very deep. I diagnosticated the case as abscess of the liver, with an inclination to discharge through the abdominal walls; and I made an incision an inch in length, and about that in depth to get through the fatty layer. I used my finger to clear the incision to the true walls of the belly. I then sent an exploring needle through the abdominal parietes, and struck a purulent cavity. The use of a bistoury gave vent to a free discharge of pus. I evacuated an abscess of the liver, and the woman recovered without unpleasant complications.

It would have been difficult to diagnosticate any of these cases of deep abscess if it had not been for the exploring needle. Nothing in modern surgery has contributed so much assurance as the simple little implement. The portable case of my hip-pocket contains two aspirating or exploring needles. One is small and the other large. If a suspected aneurism was to be explored I should select a needle of small calibre. The larger does to tap hydroceles, and then be used as a cannula to convey a fluid injected to excite adhesive inflammation.

ASPIDOSPERMA QUEBRUCHO.

BY JOHN FEARN, M. D., OAKLAND, CAL.

A FEW years ago many new remedies were introduced with which the physician might combat disease. It is true some of these remedies had been used for years in domestic practice, but they were then for the first time introduced to the profession. And if we were to believe all that was said about some of these remedies, they were to prove veritable Samsons in the conflict with the various ills to which the body is subject in this mundane sphere. These new remedies, chiefly vegetable, multiplied so fast that some of the more conservative in the ranks of the profession took alarm and began to be afraid that in the race to introduce *new remedies*, the old would be forgotten. This fear I think was groundless, for who that in clinical practice has proved their value can forget the *positive* results obtained from *Aconite*, *Nux Vom.*, *Macrotys*, *Gelseminum*, *Phytolacca* and a host of others we could mention. We believe that while there is a departure from the *normal* condition of the body to be righted, while there is pain to be relieved and

health restored, these remedies will never be forgotten. Some of the new remedies have failed to produce the results expected of them, and have therefore little prospect of becoming permanent additions to the *Pharmacopœia*. Others we think have come to stay, and among these may be enumerated in the front rank, "Aspidosperma Quebrucho." This tree we are informed grows in the province of "Cata-marca" in the Argentine Republic, and the bark is used by the natives in asthma and malaria.

I have been using this remedy upon different occasions for about two years past. And so far the result of my observations are, that it is a stimulant and tonic to the pneumogastric nerve, and especially to the cardiac and pulmonary branches of that nerve.

My first case was an engineer, aged about 45 years. He came complaining of cough. He coughed very little in the day-time, but still it was troublesome; there was some difficulty of breathing. His face wore an anxious look, his eyes rather sunk, his lips and mucous membrane were cyanotic, all showing depression; his pulse was small, hard, and intermitting; it would beat twice and then there would be an intermission. I inquired whether his cough, etc., troubled him worse between the hours of 1 A. M. and 4 A. M. He said with much emphasis, Yes. That was the time when he had his principal trouble. On inquiry I found he was working where he was exposed to stony fumes of ammonia, and being in poor physical condition, I reasoned that the ammoniacal fumes had produced irritation of the pneumogastric, and the cough, difficult breathing, and intermittent pulse were the result; ordered him to keep away from the ammonia fumes as much as possible. Prescribed: R—Fl. Ext. Quebrucho ʒi, Elix. Simplicis ʒvij—M. Sig. ʒ every three or four hours.

The next day reported much relieved, rested better, coughed less, cyanosis very sensibly relieved. The medicine was kept up for a few days with the addition of a good tonic, and the patient was discharged. As confirming the diagnosis with respect to the ammonia: Months after the attack above mentioned, while suffering with a cold in the lungs, he was again exposed to the ammonia, the same symptoms again returned, aggravated by the cold. The same remedy aided by a few doses of quinine afforded relief.

Case No. 2.—A lady who was being treated by her physi-

cian for an ovarian difficulty. She took cold which settled upon her lungs. Her physician was out of town, and I was called upon to give present relief. Examination revealed, face pale and anxious, lips and mucous membrane cyanotic, breathing difficult, cough troublesome, pulse intermittent, and all these symptoms aggravated from soon after midnight to 4 A. M. Prescribed: R--Fl. Ext. Quebrucho in two drop doses in syrup of tolu every two or three hours. Result: breathing, cough, and circulation relieved, and general condition much improved. I have since used it in cases of asthma, etc., with like good results; others have used it at my suggestion and report favorably. I am a thorough believer in "Prof. Scudder's" teaching, that we have medicines that are specific. Not to certain diseases, but to certain conditions of disease. Past experience justifies us in predicting for this remedy a wide field of usefulness, in asthma, capillary, bronchitis, and emphysema.

But no matter what the disease if there is imperfect oxygenation, if the totality of symptom's point to depression of the functions of the pneumogastric, as seen by intermittent pulse, difficulty of breathing, cough and cyanosis, and especially if these symptoms are aggravated in early morning.

We would say give "Aspidosperma Quebrucho" a trial. Prescribe it intelligently for specific conditions and you will be pleased with it.

But if you give it for every case of bronchitis, emphysema, and asthma without reference to conditions, you will most certainly be disappointed.

WOMAN IN MEDICINE—A COLLOQUY.

BY J. M. YOUNG.

[Student of Medicine in California Medical College.]

(Continued from March.)

"Deep, indeed,
Their debt of thanks to her who first had dared
To leap the rotten pales of prejudice,
Disyoke their necks from custom, and assert
None lordlier than themselves but that which made
Woman and man."

—*The Princess.*

HE: For this woman to step from the ranks of the trifling devotees of fashion and folly, with a disposition to explore the fields alluded to, and above all the means to gratify this most noble desire.

SHE: Ah! there is the profoundest cause for the lack of great women in medicine. No man has become great in science without a vast expenditure of time and money. He has had to bring all the qualities that characterize the great of either sex; investigation, endurance, thoroughness, a habit of minute accuracy, a delicacy of perception, a patience of details, and must rise through them all to the dignity of an investigator, a thinker, an inquirer. There are many women who would undertake such a task, but those who throng our halls of learning are the daughters of men in humble circumstances, men who educate their families to the end that their education may be a source of income to them; and the budding aspirations of the female scientist are blighted by the inexorable cry for bread. "Our poverty, not our will, consents." On the other hand while the sons of rich men are not, as a rule, aspirants for the laurels of science, they are far more frequently so than the daughters of affluence, who affect, if any, the more gaudy pursuits of painting and music, principally to gratify their very feminine love of display. We want women of means, to whom science will become a passion, the laboratory a paradise, and who will exclaim in the language of the great scholars of the sixteenth and seventeenth centuries, *Labor ipse voluptas*.

HE: Medical women whose avocation is selected simply because they think it is easier to doctor than to sew for bread, generally barter their birthright of quiet life and long happiness in the peaceful seclusion of home, for a nauseous mess of poisoned pottage that does not appease their hunger, and fails lamentably in elevating their sex or aiding humanity.

SHE: Again that old argument of "Woman's Sphere." "The advance of women in useful attainments is the most infallible sign in any country of advancing civilization." Her right to every avenue of "bread winning" is as unquestionable as man's. If she performs the same work in as thorough a manner she should get a like recompense. It belongs to the realm of fancy and not to the domain of fact to suppose that every woman is a "home maker." With Dr. Morgan Dix I believe that "to study the history, the structure, the necessity of the home, would be more profitable than any amount of abstract science." Yet it is not always woman's privilege to lay the *foundations* of a

home. Man must lay the foundation, the woman rear the lovely structure, builded by her devotion, cemented by her self-sacrifice, and carven and graven by the deft touches of her gentle ministrations. But suppose a homely face, a widowed heart, or any of the thousand and one circumstances that do arise, denies her entrance to your "Lotus-eaters" realm, must she then be relegated to employments and tasks demanding the great and incessant exercise of that which she possesses least of, namely, physical strength? Such a fallacy bears its refutation on its face.

HE: But the cry of "moneyed women to the rescue," seems to me a singular evidence of your want of faith in the intellectual resources and ingenuity of your own sex. The great men of our land have been, invariably, the sons of poor men, to whom collegiate training was denied by the very penury you cast as a shield over your sex. Washington, Clay, Jackson, and Lincoln in American statesmanship; and Greeley, Bennett, Forney, Medill, and Halsted of the American Press, left their impress upon the thought of their day; yet not one of them was a university graduate. Nor am I sure that a college training always educates; the great thinkers and scientists, from whose teeming brains has sprung all that is grandest in science, and most conducive to human happiness, Darwin, Tyndall, Agassiz, and others, have had the hide-bound pedants and conservative automatons of the college and university to fight from first to last.

SHE: Very true, but the gifts that made such men great cannot be won from any college and are not conferred with any university degree. A university would perhaps have ruined the genius of a Patrick Henry or a John Brown, but it would unquestionably have deepened, broadened, and enriched the more philosophic minds of such men as Lincoln and Clay. A man who could whirl up the dazzling causeway of fame in the fiery chariot of oratory, or be immortalized by the lusty acclamations of a passion-prompted people, possibly possesses in the very lowest degree the deductive and inductive methods of thought that would render him an authority in science. The woman who desires to become great in the profession of medicine must consider the degree of Doctor of Medicine but the *primer* of her education; the key to unlock the secrets of that mysterious nature that ever sings:—

"I wrote the past in characters
Of rock and fire the scroll,

The building in the coral sea,
The planting of the coal.
And thefts from satellites and rings
And broken stars I drew,
And out of spent and aged things
I formed the world anew."

HE: You admit then that woman does not hold as lofty a position in medicine as her brother?

SHE: Admitting so much does not confess her inability to attain to and maintain all the sterner sex has achieved. The first great attribute of a scientist is honesty. The discovery of fact, the story of the fact, divested of sentiment and all plausible coloring, is the only service recognized by the Gradgrind science. The world sees and hears with its prejudices and not with its senses, and women can only cleave the back of iron prejudice in twain with the steel scimitar of ability. It is not without the realm of reason to believe that the sex that gave a Christ to the world can cure the being He died to redeem.

HE: But you appoint a curriculum of labor that would appall any woman, especially those who realize the physiological impediments that debar woman from consecutive effort of either a mental or physical character.

SHE: Of all the fallacies that have been the *bete noir* of the woman movement, I have least patience with that which claims woman's inability to labor, and cites that "physiological function of the sex" as the text of their objection. Our women are graduates of the wash-tub, spinning-wheel and distaff, very difficult and wearing labor, yet the cry of "physiological function" was never heard in their behalf. The same significant silence in reference to the "physiological function" amongst the factory girls of the older States, and this new discovery of "physiological function" is as eloquently voiceless on behalf of the sewing girls of our great cities as it was when Hood saw the woman in his vision

"Dressed in unwomanly rags,
Singing the song of the shirt."

Nay, nay, the manual labor of medicine is no more wearing than that of the nursery; and the microscope demands no more "sweat of the face" than the bi-annual house cleaning of the exemplary housewife. The fact is, the very hardest and most trying work of the medical profession is performed by women. They *live* in the presence of all

the horrible, disgusting, and appalling surroundings of the sick-chamber, that which the practitioner *sees* but a few moments, is their portion by day and night. The devoted women of the Crimea, or of the sanitary commission of the United States, were not considered unable to perform duties that have made many a man falter, and the "physiological functions of the sex" never excused them from duty on the march, battle, or bivouac.

HE: But in any event woman can never hope to be complete in all the branches of the profession of medicine. The surgeon's art, for instance, must ever be a sealed book to her, else this, our *gentle* sex would lose the tenderness, the sympathy, the grace that makes the woman, in these gifts, the man's superior.

"We shudder but to dream our maids should ape
Those monstrous males that carve the living hound,
And cram him with the fragments of the grave,
Or in the dark, dissolving human heart,
And holy secrets of this microcosm
Dabbling a shameless hand with shameful jest,
Encarnalize their spirits."

SHE: Oh it will be a happy day when some giant crucible shall dissolve all the cant, fallacy, and mendacity which the world has heaped upon the already overburdened woman. Why history and experience join in proclaiming the *male* ever the gentlest and least cruel sex. The Roman matron compelling her slave to wear her bosom bared that the venomous pinch or the pricking of the punishing pin might be unhindered; Cleopatra fleeing from the rotting corpse of the too faithful Antony to fawn on the victorious Cæsar; the dancing Herodias bearing the bleeding head of John the Baptist to her mother; England's ferocious queen decreeing death to a cousin and a lover in a breath; a Medici bathing Bartholomew's anniversary in the best blood of Huguenot France; Lucretia Borgia kissing to the tomb countless victims in the Castle d'Estes, an Artemisia; a Bodicea; a Joan of Arc; and others had hands as well as "spirits encarnalized." In this latter day the hired *man* is always better treated than the hired *woman*; and the prudes of society would be the last to shelter or retrieve the Scarlet woman of the streets. Nay, nay, the sanguinary scenes of the operating table and dissecting room would prove the least objectionable portion of the study of medicine to woman.

SHORT AND SWEET.

BY C. D. R. KIRK, M. D., FERN SPRINGS, MISSISSIPPI.

MRS. P, aged 35, recently married, from some indiscretion had an abortion which was followed by hemorrhage from the uterus. When I was called the hemorrhage had continued unceasingly for ten weeks although the lady had been attended by two physicians who, from a description given by her family, used every remedy that modern medicine could suggest. They examined the patient with a speculum; tried local medication but only checked for a short while the hemorrhage which threatened a speedy dissolution.

I found the patient quite weak and despondent, she having got a notion that she had "cancer of the womb." A general examination revealed nothing to indicate the condition of the part or the remedy to be employed. I then made an examination per vaginum. The speculum failed to disclose much of importance but by the digital, which I always employ before examining with the speculum, I discovered a uterus that would rise and fall quite easily. I would remark here that it is only the experienced finger that can detect this peculiarity.

A sponge wetted in a strong solution of witch-hazel placed in the vagina with a good abdominal bandage and support and a pill of iron and quinine make a quick cure. The point is that without the pessary and abdominal support all remedies would have failed.

GONORRHOEA.

BY O. C. KNIGHT, M. D., ATCHISON, KANSAS.

STRICTLY speaking, gonorrhœa is the most venereal of all diseases, being practically never acquired except by sexual contact. It is a common complaint, and is fortunately local in its action, never producing constitutional effects through poisoning of the blood. It is not only common, but also ancient, and is dignified by a mention in the fifteenth chapter of Leviticus. The term gonorrhœa is etymologically inaccurate, indicating, as it does, a flow of semen; but usage has sanctioned it almost to the exclusion of the old Saxon term, clap. A spurious form of gonorrhœa is sometimes developed from an acrid discharge, which is more apt to be communicated to a man than to a woman, and then

to the latter only if great violence is done, as in case of rape.

Gonorrhœa is a notoriously contagious disease, being caught by the mere contact of the discharge with the mucous membrane of the urethra. The period of incubation varies from a few hours to fourteen days, rarely less than twenty-four hours, and seldom more than eight days. The first symptoms are usually noticed on the seventh day, by a teasing, tickling, itchy irritation at the orifice of the urethra, slight swelling and reddening of the lips of the meatus, and great pain in passing urine. After four or five days the discharge becomes more copious, becoming thick and purulent, and is sometimes of a greenish color, if mixed with blood. During an erection the mucous membrane becomes cracked, producing more or less hemorrhage, with pain in the groins, testicles, perineum, and back. Retention of the urine may be caused by a spasmodic action of the urethra, by an extension of the inflammation backward, but is rare. When it occurs it is apt to be in hard drinkers. As the disease progresses, œdematous lymphitis may occur, causing phymosis, or paraphymosis. If the prepuce be naturally tight balanitis may supervene. Erections can be expected at this time which are attended with great pain. Chordee indicates that the inflammation has extended beyond the free surface of the mucous membrane, invading the delicate meshes of the erectile tissue of the corpus spongiosum, the pain being caused by the stretching of this tissue while in an inflamed state. After the disease has continued for three or four weeks, the inflammation has traveled to the root of the penis, and the discharge becomes watery, often being diminished to but a drop in the morning. The meatus becomes agglutinated, as in the early stage, which soon ceases, and the patient is well. There is but little if any constitutional disturbance, with, perhaps, slight feverishness in nervous persons, and a fancied feeling of prostration during the continuation of the discharge. The duration of gonorrhœa is variable, lasting, as a rule, from two to six weeks, and, under good treatment, sometimes less. A first gonorrhœa is the most severe, but it is also the most certain to get perfectly well, if carefully managed. The course of the inflammation is to begin at the meatus, and to travel slowly backwards, but without producing ulceration. When the disease is older, the lesion is similar, but deeper seated. It finally becomes localized at the bulb, in the fossa navicu-

laris, or at some point along the canal, which results in stricture, with gleet.

In gleet there is a serous discharge of a scanty, greenish or bluish fluid, which is secreted from altered patches along the canal, or from the congested membrane behind a stricture, and lasts an indefinite time. A person thus afflicted is a fit subject for bastard gonorrhœa. Gleet is contagious, if purulent. The more creamy and copious the discharge the greater is the danger from infection.

The treatment of gonorrhœa consists of two methods: first, by the abortive, in which means are used to arrest it at once; and second, the methodic, in which the treatment is adapted to the stage of inflammation. The first consists mostly of injections of some caustic liquid, which is intended to alter the inflammatory action. In choosing an instrument for this purpose, a syringe, with a short, blunt nozzle, not unlike an ear-syringe, should be selected. As little of the point should enter the urethra as possible, as its presence there is irritating, and tends further to excite the inflammation. The patient should micturate before using the injection. Fill the syringe with the liquid, warmed, press the piston sufficiently to expel any bubble of air that may be contained in the chamber of the cylinder, enter the nozzle gently into the meatus, compress its lips tightly from either side, when its contents are thrown into the urethra by a gradual steady pressure upon the piston. The syringe is then withdrawn, while the fluid is retained in the urethra by a pressure of the thumb and forefinger on the glans penis, from side to side, placed in position for that purpose previous to the withdrawal of the instrument. If it is desired to bring the injection in contact with the deeper portions of the urethra, it can be accomplished by compressing the canal from before backwards, or by the sliding motion of a finger of the disengaged hand, along the course of the canal, up to the penoscrotal angle: its entrance into the bladder is an accident always to be avoided. Maneuvers in the use of the syringe, for the abortive treatment, can only be learned by practice. The internal use of balsams, to abort the disease, has been found unsuccessful, and therefore abandoned. The agent most commonly used as injection, as an abortive of the disease, is nitrate of silver. The strength employed is variable, from one-half to fifteen grains to the ounce of water. I seriously question its utility in any case,

and I therefore do not use it. If it cures at all it must be used before the discharge is twenty-four hours old. If the first attempt to abort an attack fails, no further trial is justifiable. If its use is unduly pushed, the meatus swells, the penis becomes turgescient, and a more copious discharge escapes.

Tannic acid is likewise used for the same purpose, and, being milder, is certainly less objectionable. Niemeyer recommends five grains in an ounce of red wine, double the amount of tannin to be used after the second day, if the discharge has not ceased. This will cure some mild cases, even if it does not always improve severe ones. In true gonorrhœa there is no certainty of success in employing the abortive method. A safer and surer method, though slow, is preferable.

Attention to hygiene, in the treatment of this disease, is of the utmost importance. If neglected, the best-directed efforts may fail to arrest the discharge. Absolute continence until at least ten days after the complete cessation of the discharge, should be enjoined, and every thing avoided that is likely to excite the sexual organs. Above all, no malt or spirituous liquors should be drunk during treatment. A little claret is sometimes good and even positively beneficial in an enæmic patient during the gleety stage. Highly-seasoned food, violent exercise, horseback-riding, dancing, etc., should be sedulously avoided. If the testicles are sensitive, a suspensory bandage must be worn. In great irritability of the urethral tract, with frequent call for micturition, it is advisable to prescribe perfect rest. Caution should be taken that none of the discharge gets into the eyes. The genitalia should be frequently bathed in warm water. In other respects the patient's habits need not be modified. The hygienic conditions prescribed must be laid down in black and white, and not an inch of license allowed. If the patient can be prevailed upon to remain in bed for a few days so much the better; but in all cases this can hardly be expected.

The first medicine that is administered internally should be an alkali, after the following formula:

R—Potassa Citratis \bar{z} ss, Spts. Limonis \bar{z} ss, Syr. Simplex, \bar{z} ij, Aqua Font. \bar{z} j—M.

Sig.—One dessert-spoonful in a wine-glass of water four times a day. If desired, it can be taken in Vichy or other

mineral water. Should the inflammation run high, flaxseed tea, drank freely, will be found advantageous. If micturition be very painful, one to three grains of the extract of hyoscyamus may be added to each dose of the alkali mixture. Bicarbonate of potash may be substituted for the citrate.

Next in order comes the balsam of copaiba, or sandalwood oil, the latter being preferred by some, as it is more agreeable to the stomach. My favorite prescription for the exhibition of balsam, is the following:

R—Balsam Copaiba, Spts. Nitric dulcis *aa.* \mathfrak{z} j, Liq. Potassa \mathfrak{z} ij, Fl. Ex. Glycyrrhiza \mathfrak{z} ss, Oil Gaultheria gttsxvj, Syr. Acacia \mathfrak{z} vj—M.

Sig.—One tablespoonful three times a day, after each meal.

Sandalwood oil can be substituted for the copaiba in the prescription, or either may be given alone, in capsules. If the balsam interferes with the digestion the dose must be diminished or discontinued. Immersing the penis in hot water will relieve painful micturition and prevent chordee. If this fails to subdue the chordee, a two-grain pill of opium, with four grains of gum-camphor, should be administered on going to bed, or an opium suppository introduced into the rectum.

Balsam of copaiba is occasionally the cause of an erythematous eruption, covering the whole body, which is exceedingly annoying. It is of but little importance, and subsides in a few days, if the remedy is discontinued. It is sometimes mistaken by the young practitioner for syphilitic roseola. The burning itching is soothed by a warm, weak, salt-water bath.

Cubebs, as already stated, is given with copaiba for its anti-dyspeptic powers, making the stomach tolerate the balsam in delicate persons. They are with advantage combined in pill form, as follows:

R—Copaiba \mathfrak{z} ij, Magnesia \mathfrak{z} j, Oleum Mentha pip, gttsxx, Cubebs pul., Bismuth sub. nit. *aa.* \mathfrak{z} ij—M.

Make into five-grain pills. Sig.—Two to five pills every four hours.

Bland injections are of great service in gonorrhœa, or any other kind of urethral inflammation. Medicines are sometimes best applied in the form of a powder or an ointment; as, tannic acid, iodoform, morphine, etc., made into a soluble

bougie with coco butter. A very good injection for the following stage is:

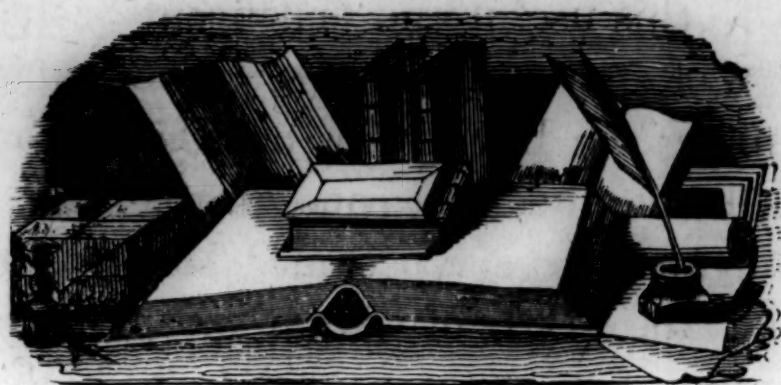
R--Hydrocyanic Acid, dil. \bar{z} ij, Aqua Dist. \bar{z} jv--M.

Sig.—Use with syringe, every four hours.

This is a mild preparation, causing no pain during or after injection.

In the gleet stage, permanganate of potash, one to three grains to the ounce, alone, or combined with a trace of sulphate of zinc, answers an excellent purpose. Some patients, during the gleet stage, require other than local treatment for the urethra, as in the case of a strumous diathesis. A strict observance of hygiene, as affecting the urethra, should be enjoined, with the use of cod-liver oil, iron, and quinine, as constitutional remedies. The treatment should be varied so as to meet the peculiarities of each individual case. Everything earthly has an end, and so has gleet.

THE TREATMENT OF EXOPHTHALMIC GOITRE BY SUBCUTANEOUS INJECTION OF DUBOISINE.—M. Desnes (*Lyon Méd.*) reports three cases of goître treated by the subcutaneous injection of the neutral sulphate of duboisine ($\frac{1}{2}$ to 1 milligramme daily, according to the tolerance of the individual). In three cases the amelioration has been most marked: the projection of the eyeballs decreased; the palpitations became less severe; the general health improved, and the throbbing at the thyroid vessels became less. On the cessation of treatment, the amelioration diminished. The experiments have not been sufficiently numerous as yet to determine whether the cure is permanent. In two cases the remedy had to be stopped, the patients complaining of a feeling of intoxication, cramps and formication in the gluteal region and at the back of the thighs, &c.—*Glasgow M. J.*



EDITORIAL.

Material for Dissection in Medical Colleges.—It is said that there are two sides to all questions, and as the above one is being freely discussed before the public—one side only being presented—it becomes our duty and prerogative to present the other.

The body of the dead in all ages has been protected by law. This is but right that we should be guaranteed the protection of the law in any way we may see fit to dispose of the remains of our relatives. In the more superstitious ages, no doubt, there was a belief that the body and soul would be reunited after death, and this caused the sepulcher to be guarded with the greatest of vigilance. However, with the development of natural science in general, the thirst for a knowledge of the structure of the human body became so great that it caused men to violate this law and take possession of the remains of deceased bodies and search in them for the cause of life, and observe closely the complicated structures that carry on the functions which constitute our existence.

All of our school children are familiar with the story of the immortal William Harvey and his discovery of the circulation of the blood. Stories might be recited of the brave Italians who defied the statutes—took their lives in their own hands and conducted their anatomical investigations in secret. They not only took the risk of loss of life and liberty but made a sacrifice of their whole lives to the

development of this useful and beneficent branch of science—a knowledge of our own bodies. The superstitions of the church during the Dark Ages prevented the dissection of the human body, and, as a consequence, the science and art of medicine and surgery became debased to the very lowest ebb that the craft of witch or priest could bring them. A running ear was considered a discharge of the brain substance and a certain vein in the arm (the cephalic) was thought to carry blood directly from the brain. The recital of the cruelties and crudities of the practices of those days are such as to make us shudder when we call to mind the amount of suffering inflicted by those who attempted to cure disease. The Greeks made considerable progress in anatomy, and the healing art seemed just about to bloom into usefulness, when ignorance and superstition chained the world in darkness and all development in this line ceased for several years. Men seemed content with the art of the priest and witch and when poisoned by the filth of their own dejections, or otherwise ill from the violation of laws of life, asked only to have evil spirits, their only conception of disease, cast from them. Whole cities, through this ignorance, fell a prey to the plagues so prevalent in those times, and hundreds and thousands of witches (so called) were burned, drowned, or hanged to appease the evil one. Cruelty and the most awful crimes begat of ignorance and superstition were legalized. The development of natural science, and notably that which has been evolved from anatomical investigations, has made it possible to prevent the depopulation of large cities, furnished methods of cure for diseased processes and for the relief of pain. Surgery in particular has been so greatly enriched from this source as to be an incomparable blessing to humanity.

The barnacles of superstition of the Dark Ages linger among us yet, to the extent that the individual who makes dissections on the human body is considered a hardened wretch—a human ghoul—who robs the grave of its

precious sleeper, and with unfeeling indecency carves its tissues. It may be claimed this is not the case, and that nearly all are sufficiently civilized that they can appreciate the scientists' devotion to a noble cause, but the sensation produced in a community by the discovery of the remains of a person which may be identified, would give evidence to the contrary. The State of Maine, we are told, has a law forbidding the acquirement of dissecting material with the exception of persons executed by hanging, yet it forbids the right to practice medicine or surgery except to those who have made dissections. What feelings of supreme pity we should have for a people so benighted and unjust! Our people—our law-makers—make no effort to secure to medical colleges the remains of those who die friendless, but on the contrary throw every obstacle in their way; but should a surgeon fail to display first-class ability in the execution of surgical procedures, they cry out that he be severely punished for his mistakes.

“How Are Your Bowels?”—There is hope that in the future of medicine the much abused alimentary canal will finally be allowed to pursue its legitimate functions without interruption and abuse from the over officious medical practitioner. Already there is a growing tendency upon the part of even obtuse old allopathy to treat this subject with more of respect for the injunctions of nature, and less regard for the heresies inaugurated by Aristotle and other of those old dotards of semi-barbaric times, whose ignorance and superstition saw the bowels only in the light of a human sewer through which the disease-generating *phlegms* were expelled from the body.

But there is yet a large following both among the eclectic and allopathic ranks, the eclectics being usually old-timers, to whom the query, “How are your bowels?” constitutes an important part of an examination preliminary to the administration of remedies. Not that the answer is likely to swerve them from a fixed purpose, for energetic lightning

pills are lurking in their pill-bags, eager to begin searching out the inmost secret recesses of torpid livers or "arousing the secretions" somewhere, the doctor himself cannot tell you just where, but somewhere in the intestinal labyrinth.

The solicitude of this class of doctors is almost as earnest for the alimentary tracts of their patients as that of the fond mother for the bowels of the hopeful son who swallowed the ten-dollar gold-piece. While life exists, and until death claims his own, they watch this portion of the economy with tireless devotion.

We recollect an impressive occasion upon which we were once called to arrive after a loved wife and parent had breathed her last through the aid of one of this class, which gentleman had judiciously retired from the scene when it became evident that his last dose would have the effect of doing away with any more use for his valuable services. History disclosed that the case had been one of malarial fever, and the bowels not having moved for a week, though urged to do so by the attending physician, a panic had seized physician and friends, who severally decided that "something must be done." And though the patient seemed to be doing fairly well, inasmuch as a time-honored custom was being violated Dr. Physick decided to advance upon the enemy with a dose of croton oil. This had the desired effect. The heroic doctor succeeded in producing stools of fecal matter, mucous epithelial scales, disorganized blood, etc., but just at the hour of his triumph the patient collapsed and died.

Dr. Oliver Wendell Holmes may be a superannuated bigot and may deride eclectics, but if he has said, "If all the physic was thrown into the sea it would be better for mankind but bad for the fishes," we indorse him thus far at least.

Mild agents to stimulate the intestinal tract may be admissible upon rare occasions, but the practitioner who habitually prefaces other treatment with an active cathartic ought to live away up in the woods and vote for General Andrew Jackson once every year.

More Eclectic Medical Colleges.—There was a time when we thought with Prof. Scudder that it was not wise to multiply our colleges, but had better direct our energies to the support and upbuilding of those we had; but we have been lead, from later occurrences, to think otherwise. When "Bennett" started in Chicago there were but two or three physicians of our school in that city, but now eclecticism is well and respectably represented there. But it has not always resulted so favorably to us. The Buchanan nastiness disgraced our school and positively injured the standing of our physicians in all the Eastern States. There are a few other diploma mills sailing under our banner which are injuring us in other localities. So it is not that we object to new colleges, but our anxiety is as regards the way they may be conducted. Bennett has made eclecticism respectable in Chicago because she is respectable herself. There are some other of our colleges while they are not committing any overt acts are being conducted on a *cheap John* basis which does not redound particularly to their credit or that of our school. This is as might be expected that our system will be estimated by the character of its institutions of learning.

And now we wish to offer a little advice to the brethren who have recently embarked in the enterprise of creating colleges, or who are contemplating such a movement. In the first place, under the best of management, there is no money in the business for a great number of years, and the only remuneration that can be worth estimating is the respectability of the position as teacher. Those of us who have a weakness for being called professor, had better see that it be a credit rather than a discredit to us to be associated with a so-called institution of learning. We had better graduate few students who will be an honor to us than many who will be a reproach. God knows there are enough physicians now, of the kind they are, and why multiply so rapidly their numbers. The Eclectic College of Maine must be a little cheap, giving a full course for seventy-five dollars

and a scholarship for one hundred. What their requirements are we do not know. Indiana has a "Beach Medical College," new fledged, the result of a quarrel in the faculty of the Indiana Eclectic College. Most of our eclectic colleges are graduating on two five-month courses, with optional attendance upon a summer course. The Iowa Eclectic College has two twenty-week terms each year, the same, we believe, as the eclectic medical institute of Cincinnati.

One would think there must be a great scarcity of physicians from the way some of our colleges are crowding their students through. The California Medical College requires two years with four terms of lectures, two winter terms of six months each, and two summer terms of three months. Next year we will require a preliminary examination before admission to college, and the next, we hope we will require three years attendance. Our Kansas eclectics are now considering the propriety of instituting a college, and it is to be hoped they will not start a cheap one as there are plenty of cheap allopathic colleges in their vicinity to turn out M. D.'s should there be a necessity for a greater supply.

You Name It.—We have observed a number of peculiar cases within the last few weeks depending probably upon a sort of *geuus epidemicus* which we deem worthy of notice.

These cases while involving the entire organism exhibit the principal local disturbance in the upper portion of the alimentary canal.

A condition of general indisposition and slight febrile disturbance precedes the local affection, which begins with difficult deglutition and burning sensations in the posterior nares fauces, pharynx, and esophagus, which finally extend to the stomach. Radiating pains now dart from these surfaces into the surrounding structures, the gastric difficulty often giving rise to agonizing pectoral and precordial twinges.

An examination early in the onset will detect a bright red suffused state of the fauces and pharynx and somewhat later the soft palate and uvula will be found edematous and now there will be a profuse ropy secretion thrown off. Later, ulcers will appear in the pharynx and sometimes on the tongue, the mucous membrane of the pharynx having become darker. Stinging pains attend the act of swallowing along the esophagus, and burning shooting sensations in the stomach continue throughout the period of digestion.

Our treatment has been aconite and gelsemium early, until febrile symptoms have been controlled. The throat symptoms which are often the most aggravating in the beginning are best remedied by apis especially if there is bright red color with stinging pain or if there is edema of the uvula. This remedy will then be found to exert a soothing effect upon all the affected parts. When ulceration is found to exist, we alternate baptisia and bichromate of potassium third decimal. These remedies will be found to exert a good influence in restoring the affected parts to their normal condition.

Where muscular pains (rheumatoid) linger about the head and neck in the occipito-frontalis, temporal trapezius, and other muscles, we may think of cimicifuga or caulophyllum. But the most prompt treatment consists in faradizing these parts with the positive pole. Let the patient hold the negative in the hands or sit upon it and thoroughly treat with the positive beginning with a very mild current and gradually increasing until it is as strong as can be borne. Continue the treatment for from five to ten minutes and finish with the tonic treatment. Repeat this as often as every other day for several days.

There are indications for antizymotics in some of the cases. Especially do we find an indication for the sulphite of soda. When these are exhibited, they should not be overlooked.

There is undoubtedly ulceration of the esophagus and stomach here, and the reputation which baptisia and kali bichrom have in such conditions seems to be well sustained.

The Medical Brief.—Just to what extent a medical paper is to be utilized for the purpose of allowing medical gas-bags and charlatans to gratify their egotism or advertise their wares is a question of no small importance. The pages of a medical journal are supposed to be open for the reception of any man's opinion, whether good, bad, or indifferent, the editor not being responsible for any of them ; and it is for any one who may see fit to commend or refute. There is no purpose to which such periodicals could be put that would so interest and instruct its readers as discussion through its pages, so that it be carried on as would befit scientific, philosophic men. The *Brief*, however its pages may be criticised for their shallowness, has shown itself a successful example of this principle of journalism—grown as it has in a few years to have a circulation almost second to none in this country.

This paper has published as much worthless stuff perhaps, in its time, as almost any other, but the editor has done his part well in dressing up the *queries* of his illiterate correspondents so that they feed the desire for practical information acceptably. Any man who wishes to blow his bugle can do it through the *Brief*, let it be for what motive it may, and in this respect it sinks itself beneath the sphere of true journalism. In the April number one Dr. W. H. Kimberlin, than whom few greater quacks exist, comes to the front in two articles, one advertising his stock of artificial eyes, and the other his "Kansas City Atomizer." The Dr. has the right, if he chooses, to advertise himself in this way seeing he is in this business (advertising), but it seems the editor might use his editorial discrimination and consign all such communications to the waste-basket.

S

Write Plainly.—The medical writer has many chances of being misrepresented by the printer. More than once after carefully looking over the proof-sheets of our own articles two or three times, we have found them to contain errors which were a source of mortification. Medical terms, many of them, have as little significance to an ordinary typo as Hindoo or Chinese, and a letter so written as to be uncertain is almost sure to be selected from the wrong place. Often it is a source of amusement to read the first proof of an article the chirography of which is indifferent, but if the author himself should chance to see it, then the probabilities are that unless strictly temperate in the use of words he might "talk bad."

It is a fact that some of the ablest men we have ever known are bad chirographers, but that does not make it a fact that an able man may not write a fair and intelligible hand. A good story is told of one of our eclectic *savants* who wrote an article for publication which fairly "stumped" the oldest and ablest interpreter of languages in the office of the journal in which it was to be published. It was therefore returned to the writer with the request that he re-write it and throw a little more expression into his hieroglyphics. This he attempted to do but after a desperate effort was forced to admit that *he could not read it himself*. So much for greatness!

In writing for a medical journal be sure that there is no mistaking your meaning, for at best you fall into merciless hands. The typo is more apt than not to make you say "titerus" for uterus, "arms" for anus, and "Julius Cæsar" for Simpson. Such mistakes are of course corrected by the proof-reader and editor, but the eyes of a lynx would sometimes fail to detect and remedy every error that might arise through bad penmanship. Sometimes we have felt that the foreman had intrusted our manuscript all to the "devil," but we must recollect that printers are not medical scholars, and that much of the technicality of medicine that is

familiar to the physician is entirely new to the compositor.

We shall look in coming time for contributions from our graduates. Indeed we hope that we shall not need to look long. There seems to be a spell upon the older practitioners of the coast which holds them in a silent embrace so far as contributing to our pages is concerned. We hope that the graduates of California Medical College will bear in their hearts some kind remembrance for their *alma mater* and aid in the active existence of its exponent. Therefore these hints.

Then dot your i's and cross your t's
And mind your y's, g's, q's, and p's.

Pay for Journal.—We respectfully ask our subscribers, who have not already done so, to send in pay for '83. Next month we will commence sending out bills, and you can save us considerable work by forwarding at once.

There are a few old subscribers who have neglected to keep up their subscription to whom the JOURNAL has been sent regularly, so far as we know, and we would ask them in the name and for the support of our cause to not forget us any longer.

What We Run Our Journal For.—In looking over our list of exchanges one is surprised to learn what a number of medical journals are conducted in the interest of somebody's drug, publishing house, or what not. These journals hire medical men to write articles commendatory of what they may have to sell, and send them (the journals) to every doctor in the land whether they receive pay for it or not.

This is what is flooding the country with cheap medical literature, so much so that a legitimate business can scarcely subsist.

We have no commercial enterprise to pay us for editing our journal and shall be obliged to extend and maintain our circulation on merit. We do not intend to send it without pay. We are conducting the CALIFORNIA MEDICAL JOURNAL

in the interest of the subscriber and shall look to him for our support. It is our desire and intention to make it worth the money asked for it. We realize this fact that if our school of medicine is made to assume the place in this State that it ought, it will depend very largely on us. Our college will be estimated by the qualities of the JOURNAL, and should it possess no excellence our students will be inferior in intelligence and few in numbers. For all this work we need your help in the shape of money and good communications.

DR. CHAS. WHITFORD, who some of our readers will remember as one of Bennett's graduates, called on us. The Doctor has been on a tour with a patient of his to southern California, and is this far on his way to his mountain home. We have known the Doctor for a number of years, and was much pleased to meet him. He is in love with the "glorious climate of California" and *shouldn't wonder* he may move here some day.

THE fourth annual commencement exercises of the California Medical College were held April 25, 1883, at the Hamilton Church. The affair was a grand success in every respect. The programme, as will be seen below, was lengthy, but of such a character as to hold the audience two hours and a half, spell-bound as it were. We do not know, but there must have been over two thousand people present, and many who could not gain admittance had to go away.

PROGRAMME.—Piano Solo—"The Brook," Miss Mattie Pulsifer; Invocation, Rev. Dr. J. K. McLean, Solo—"Lo Scapato" (Tito Mattei), Wm. G. Cogswell (late of the Italian and English Opera, New York); Conferring of Degrees, President Maclean; Solo—"My Queen" (Blumenthal), Miss Lizzie Boyer; Class Valedictory, Sherwood O. Cassity; Solo—"The Anchor's Weighed" (Braham), Prof. J. R. Ogilvie; Address to Graduating Class, Prof. Herzstein; Duet—Violin

and Piano, Miss May and Master Ed. Starkey; Class History, Mrs. May H. Whitney; Song—"Yeoman's Wedding" (by Poniatowski), Wm. G. Cogswell; Recitation, Miss Ida D. Benfey; Duet—"Torna mia dir che mami" (by Donizetti, from Don Pasquale), Prof. J. R. Ogilvie and Mrs. Dr. Maclean; Song—Selection, Miss Lizzie Boyer; Benediction, Rev. Dr. J. K. McLean; "Home, Sweet Home."

GRADUATES 1882-'83.—C. Wallace Bronson, Sherwood O. Cassity, Everard Lang Cassells, Harriet A. Gapen, W. C. M. C. Harding, Charles P. Higgins, Olive B. Metcalf, David Harriman Rand, Allen E. Scott, William Oscar Thrailkill, D. D. S., May Harrington Whitney.

AMERICAN PSYCHOLOGICAL JOURNAL.

THIS journal comes to us among our list of exchanges as one of the really meritorious productions of the age. In the great amount of medical literature of the day, it can but be that a great part of it will be indifferent, and when one finds a journal that embodies a goodly number of articles, both interesting and bearing on topics of great interest to the profession and public, it becomes his duty to acknowledge such merit and lend his encouragement to such efforts.

This journal is a quarterly and is issued by the National Association for the Protection of the Insane and Prevention of Insanity. It is edited by Dr. Joseph Parrish of Burlington, New Jersey, with assistants from other parts of the country. Price \$2 per annum.

We can do no better to give the reader an idea of it than by giving the title of some of the original articles:

"The Rights of the Insane and Their Enforcement," by Clark Bell, Esq.; "The Prevention of Insanity in Certain Cases of Nervous and Hysterical Women," by Harry Marion Sims, M. D.; "On Some of the Conditions of Life which Influence the Production of Insanity," by Charles Mercier, M. B.; "Prevention of Insanity by the Rational Treatment of Inebriety," &c.

There is entirely too little known on these subjects by physicians, as they are not taught in our medical colleges to any extent. We think the time is coming when it will be taught in our colleges, and the day should not be far distant. The alarming increase of insanity should lead the medical profession to be making investigations as regards the cause, and also as to a rational treatment. The most of the positions as physicians in our asylums are obtained through political influence, and as a consequence the ability is anything but first-class.

In conclusion, we would say that if any of our correspondents or subscribers know anything or have any opinions or convictions on this subject (viz.: the causes and treatment of insanity) let them embody it in an article and we will gladly find a place for it in our journal.

BOOK NOTICES.

THE MICROSCOPE AND ITS REVELATIONS.—By William B. Carpenter, C. B., M. D., LL. D.; Sixth Edition, Illustrated by Twenty-six Plates and Five Thousand Wood Engravings. William Wood & Co., 58 Lafayette Place, New York.

THIS is the April number of the series published by this enterprising firm. These are all beautifully arranged handbooks, and are so cheap that no physician can scarcely afford to be without them. This number is designed particularly for the beginner in microscopy, and will certainly be an admirable help. The author has given considerable space in displaying and describing the different forms of instruments, so that the uninformed may be able to select an instrument that will be what they desire, both as regards price and usefulness.

THE PATHOLOGY AND TREATMENT OF DISEASES OF THE OVARIES.—By Lawson Tait, F. R. C. S., Eden. and Eng., Surgeon to Birmingham Hospital for Women, and Consulting Surgeon (for diseases of women) to the West Bromwich Hospital; Fellow of the Royal Medico-Chirurgical Society; Member of the Surgical Society of Ireland and of the Medico-Chirurgical Society of Edinburgh, etc. Published by Wm. Wood & Co., New York, and for sale by A. L. Bancroft & Co., San Francisco, Cal.

AMONG the really meritorious publications of Wm. Wood & Co. this is certainly one of the best. The medical authorship of the future will be Monographs, and this firm is certainly doing a commendable work in calling out authors in

this line. In the olden time works written on the practice of medicine or surgery were made up of much that the author did not know, as it is impossible that one man should, by personal experiment or investigation, be well informed in all departments of the healing art. Many a meritorious surgeon has sacrificed the confidence of his readers by what he has written, in order that his volume be complete, on subjects of which he knew practically but little, and as much may be said in other departments of medical authorship.

Exact knowledge of the function and pathology of the ovaries has been wanting by the profession, and we hail the fruits of patient and exhaustive labor on this subject with interest. The student or practitioner will be amply rewarded by the perusal of this book.

THERAPEUTIC HANDBOOK OF THE UNITED STATES PHARMACOPŒA.—Being a condensed statement of the Physiological and Toxication, Medicinal Value, Methods of Administration and Doses of the Drugs and Preparations in the latest edition of the United States Pharmacopœa. By Robert T. Edes, A. B. M. D. (Harvard). Published by Wm. Wood & Co., New York.

THIS work needs no comment of ours as regards the matter selected as being the most useful or requisite for the practice of medicine, as each individual practitioner has his peculiar notions in regard to the paramount importance of certain remedies, but the arrangement seems to be good and to a person wishing such a work it will be found interesting, and no doubt useful. It has 397 pages.

LABOR AMONG PRIMITIVE PEOPLES.—Showing the Development of the Obstetric Science of To-day from the Natural and Instinctive Customs of all Races, Civilized and Savage, Past and Present. By George J. Engelmann, A. M., M. D., Professor of Obstetrics, Post-Graduate School of Missouri Medical College, St. Louis. 8vo, pp. 227. St. Louis: J. H. Chambers & Co. 1883.

This is the second edition of this work. It represents a great amount of research and is novel, interesting, and instructive. In looking over the customs of the peoples of the earth in all ages and conditions of civilization, one can get an idea of what is really new in the obstetric art of to-day. Obstetricians get very narrow in their ideas of the position the female should be in during the parturient act, insisting that they all lie just so or (according to the doctor's opinion) suffer great damage. From the perusal of this book it will be seen that women will get through this act just as well in a great many different positions and that the instincts or feelings of the patient are worth fully as much as the doctor's rule.

SELECTIONS.

ON SOME OF THE CONDITIONS OF LIFE WHICH INFLUENCE THE PRODUCTION OF INSANITY.

BY CHARLES MERCIER, M.B. (LONDON), F. R. C. S.

ASSISTANT SUPERINTENDENT OF LUNATIC ASYLUM OF THE CITY OF LONDON.

[Read by Richard Vaux, Esq., of Philadelphia.]

By the conditions of life is meant, in this paper, the totality of the surrounding circumstances in which a human being lives and moves. They include the air that he breathes, the country that he inhabits, the geological nature of the soil on which he lives, the construction of his house, the nature of his food and drink and clothing. They include the stratum of society in which he lives, the occupation by which he earns his livelihood, the political system of which he is an item, the religious community to which he belongs, his family, his township, and his amusements. They include, in short, every conceivable circumstance, external to the body itself, that can influence the processes going on within it. The problem before us is to determine what modifications of these conditions conduce to the production of insanity; and what other modifications of them favor the maintenance of healthy life, and exert an influence against the production of insanity. Within the limits of a paper of this kind, so vast a subject can be dealt with, it is manifest, only in the most broad and general manner, but the main outlines being sketches, it will not be difficult for the reader to fill in the details for himself.

It may appear that such remote conditions as that of climate, such a necessary and uniformly acting condition as that of the air respired, or such a recondite condition as the geological character of the soil, can exert upon the production of insanity an influence so slight and so obscure, that to consider them at all is mere trifling with the subject; but when it is remembered that a change of climate may produce nostalgia, a very definite form of insanity, when it is remembered that rebreathed air produces phthisis, whose intimate connection with insanity is too notorious for argument, and when it is remembered that the geological character of the soil is an efficient cause of the very striking

form of insanity that accompanies cretinism, it will be admitted that each one of these conditions may exert an important influence in the production of insanity in some one case or another.

Before examining the conditions themselves, there is one most important feature common to them all, which not only requires determination in each of them, but which can conveniently be considered as affecting them in the aggregate. I refer to the element of change. The importance of taking account of change in external conditions, considered merely as change, and without necessarily referring to the character of the change, as harmful or the reverse, is ENORMOUS. And the explanation of the immense influence of change lies deep down in the constitution of the nervous system. Every one knows that if the nerve that goes to a muscle is irritated, the muscle contracts. It matters not whether the irritation is a cut, a pinch, a blow, a burn, a caustic fluid, or an electric current. Any one of these irritants will set up a current along the nerve, which will produce a contraction when it reaches the muscle. But now comes a most remarkable fact. Maintain the pinch, continue the blow as a pressure, keep the hot iron or the caustic fluid in contact, allow the galvanic current to flow on; and what happens? Nothing. There is a momentary contraction, a jerk, when the irritant is applied; but the muscle immediately returns to a state of rest, and the irritant may be kept applied to the nerve until nerve and muscle are both dead, without the smallest recurrence of the contraction. But relax the pinch, take off the pressure, remove the cautery, arrest the galvanic current instantly; and then contraction of the muscle takes place, showing that another current had been sent along the nerve. So, if the pressure, or the temperature, or the intensity of the current, be increased or diminished, a current is set up, a contraction ensues; save only that if the increase or diminution is made very gradually, the contraction does not occur. Hence it appears that *the one condition that is essentially necessary for nervous action to take place, is CHANGE*. Without change of external conditions there can be no nervous activity, and the amount of activity is proportional, other things being equal, to the amount of the change. And the essence of change is, not so much the greatness of the interval between the state from which and the state to which the change occurs, as the suddenness with

which the change takes place. Hence we may expect to find, and we shall find, that external conditions produce the most powerful effect upon both body and mind, when they undergo a sudden change.

Hence we see, in little things, why a sudden noise causes a start of alarm, when a much louder noise arising gradually is borne with equanimity. We see why sudden changes in the weather affect powerfully not only the bodily health, but the spirits. We see why a rapid transit from town to the seaside, or from one locality to another, has often so marked an effect on the health. We see why the gradual fluctuations of commercial prosperity produced by the slow alternation of good times and bad times, has scarcely any effect in causing insanity, while a sudden fluctuation, such as that produced by a war of invasion, is accompanied by a sudden increase in the number of insane that is unmistakable. We see, if not the sole cause, a contributory cause why the self-made man bears his slowly acquired prosperity with equanimity, while those who are suddenly enriched by a stroke of luck are notorious for their extravagant behavior, which not seldom culminates in actual insanity. In this case we have a change from a less beneficial to a more beneficial condition of life; yet the beneficial character of the change is more than counteracted by the evil effect of the suddenness with which the change takes place. So the sudden death of a beloved friend is far more shocking than the death after a lingering illness; and the familiar operation called "breaking the news," is a practical recognition of the fact that the depressing effect of ill-tidings is diminished by a gradual communication; that is, by diminishing the suddenness of the change that it implies. Those who live a life in which changes are frequent and great are said, and correctly said, to live an exciting life; and a life of great excitement is admitted to be one of the efficient causes in the production of insanity. On the other hand, where the changes in external circumstances are reduced to a minimum, the nervous activity, of which change is, as we have seen, an essential condition, is reduced to a minimum; and the mental activity which accompanies and is proportional to this nervous activity is also reduced to a minimum. Such a case I have recently seen. A man was placed in solitary confinement. He had no work; no books; no exercise. Nothing to do but to sit within the four bare walls of his

cell, day after day, and week after week. From his life change was almost abolished; and with what result? In a short time his mind faded away. He neither moved spontaneously, nor ate, nor drank, nor spoke. And when, after removal to more varied surroundings, his wits returned, he had no recollection whatever of what had taken place during the latter part of his incarceration. And he never will remember, for his consciousness was, I believe, altogether in abeyance.

From all which it appears that while change in external conditions is absolutely necessary for the occurrence of any consciousness at all, and in the absence of change consciousness ceases, yet on the other hand changes may be so great, so sudden, or so numerous, as to produce an excess of nervous action, and so a derangement of mind will occur.

Passing from the general consideration of the conditions of life to a separate estimation of them, it is clear that before such an estimation of such a heterogeneous assemblage of things can be profitably attempted, some grouping of them is necessary, or at any rate expedient. The human microcosm has often been compared by physiologists to a steam-engine. Each, they say, is an elaborate mechanism which takes in potential energy, locked up in the form of food or fuel, and liberates it in the form of heat and mechanical movement; so far, it is true, the parallel holds good, but for our purposes it cannot be accepted without a certain reservation. Steam-engines are far more favorably circumstanced than most human beings; for they have their fuel supplied to them without the least previous exertion on their own part, and therefore all the mechanical movement that they exert is so much net profit to them. Their position is analogous to that of independent gentlemen who have no need to work for their living, but can devote the whole of their energies to their most congenial pursuit. If the steam-engine had to devote a large part of its mechanical power to digging its own fuel and feeding its own furnace and boiler, it is evident that it could apply to profitable use only the surplus energy that was left after these functions had been satisfied; and if it had a second engine beside it, and perhaps a number of little engines, all of whose furnaces and boilers had to be replenished before any surplus work could be done, we should then have a more accurate parallel to the condition of the vast majority of these less

avored human beings, whose leisure time and spare wealth are only the surplus that remains over after the necessities of himself, his wife, and children have been supplied.

Bearing these considerations in mind it will be seen that the conditions of a man's life fall naturally into three groups. The first includes those conditions which concern his means of livelihood; the second group includes those conditions which determine the draughts or demands upon his livelihood when earned; and the third group comprises all those circumstances in which he spends the leisure time and spare energy that remain over when the livelihood is gained and the draughts are all satisfied.

In the first group of external conditions, three elements have to be considered; which are, in the order of the importance of their influence upon the production of insanity; the precariousness, the arduousness, and the complexity of the means of livelihood.

The precariousness of a man's means of livelihood I believe to be one of the most important of the external conditions which influence his sanity. And the greater intensity of this element in the circumstances of those in an humble social position is, I believe, one of the most potent reasons why insanity is so much more prevalent among them than among those whose position, being higher, is at the same time more assured. The security or precariousness of a man's means of livelihood may vary through a very wide range of degrees, and each increase of precariousness is an additional element of danger to his sanity. The facts that hundreds of thousands whose livelihood is in the highest degree insecure never become insane, and that many (*e. g.* George III.) whose livelihood reaches a maximum of security do become insane, do not militate in the least against the statements here made. If it were maintained that this condition was the only cause of insanity, such instances would, of course, be destructive of the argument; but such is not the contention. All that is asserted is that a precarious livelihood has a favorite influence on the production of insanity; but it is freely admitted that many influences, of which this is but one, and though an important, not an essential one, must combine, for the production of this disorder.

In estimating the degree of precariousness, we may arrange the cases along a scale from the minimum to the

maximum. What is the most reliable and certain foundation upon which an income can rest? Is it not an investment in the public funds? And are not annuitants notorious for the unconscionable length of time that they live to draw the interest of their investments? Though bearing indirectly only on the subject, this is a case in point, for it indicates the generally beneficial influence of an assured livelihood upon the life of an individual.

Next in order come those cases in which a person possesses enough accumulated wealth to provide him with a portion of his means of subsistence, while the rest must be made up by his own exertions. Or, again, he may be entirely dependent on what he earns; and this condition includes many degrees, from the most secure to the most precarious. At the one end we have the tenancy of, for instance, permanent appointments under government, such as judgeships, a livelihood which is certain while health remains, and even longer; and at the other end of the scale we have the position of a day laborer, whose livelihood depends, from day to day, on the precarious chance of employment enough to keep himself from starving. While no statistics in this regard are obtainable, nor if obtainable would they be of any value, so many and so important are the complicating circumstances, it is nevertheless certain that, speaking generally, the proportion of insane people to the total population rises with each diminution in the certainty of the means of livelihood.

Under the head of precariousness another unfavorable influence has to be noticed. Diminution or loss of the means of livelihood is an unfavorable change in the conditions of life, and hence we should look, as mentioned when dealing with change in general, not only to the degree of liability to change, but also to the amount and suddenness of the change to which the person is liable. By the amount of the change which is incurred in a loss of livelihood is meant the amount of vicissitude that such a loss would involve. It is evident that a total loss will cause less vicissitude in the life of a day laborer, who lives constantly on the threshold of the work-house, than a loss which, though far removed from total, is enough to reduce a wealthy man, accustomed to princely surroundings, to a sordid dwelling in some back street, even though the worst misfortunes of this man leave him in a better position than the wildest hopes of the laborer

can aspire to. And the greater vicissitudes involved in the change of circumstances of one man will be a more unfavorable influence on his life than the change in the circumstances of the other, even though the latter is left in what is absolutely the worst condition.

Next in importance to the precariousness of a man's means of livelihood is its arduousness; and of this quality, again, there are all degrees of severity, from nothing up to a maximum. Of course, where the livelihood is secure, independently of any exertions of the individual, the arduousness is at zero; and in many a fat living and comfortable sinecure it is at a minimum; but where the livelihood really depends upon a man's own exertions, the arduousness of its demands upon his time and energies becomes an important consideration; and where this factor rises to a maximum, as unhappily it does in very many cases, it exerts a most unfavorable influence upon the bodily and mental health of the worker. There are hundreds and thousands of men in this country who know not the meaning of the word "leisure;" to whom life is one incessant, unvarying round of toil; to whom every morrow brings the self-same curse of labor with its early beams. Such men live a life that is abnormal. The monotony of their occupation forbids the various development of their different faculties. Just as, when a parasite buries its snout in its victim, and grows to it, all its energies are draughted into the functions of suction and digestion, and, little by little, its limbs wither, its locomotor faculties disappear, its eyes shrink and fade, until at length nothing remains of the complex organism but a bag of skin containing a stomach and attached to a mouth; so, when a man's whole time and energies are occupied about a single process, the faculties subserving that process become abnormally developed, and all others wither and fade. Thus his mind, becoming completely lopsided, is the more easily overturned. He has become an automaton, and although he can go through his customary routine with mechanical accuracy, yet if he be transplanted into new circumstances which imperatively demand the exercise of his disused faculties, he is as helpless and as unable to respond to the demand as the parasite would be to escape from an active enemy. This one-sided development of the faculties is, however, not the only nor the chief danger of a too arduous occupation. The main danger of

such a condition of life is that the amount of energy that it absorbs may be absolutely excessive; may be greater than the food and rest that the worker is able to get, can restore; and thus it will empty the man of all his energies, and land him at last in some bodily illness or mental disorder characterized by depression, exhaustion, and prostration.

The third circumstance affecting the means of livelihood, whose influence on insanity has to be estimated, is the complexity of the occupation, and this is important in two ways. First, because the complexity of the occupation of which he is capable is a measure of the intelligence of an individual; and, second, because a smaller disorder will unfit a person for carrying on a complex employment than will unfit him for carrying on a simple employment. It is manifest, for instance, that it requires a higher degree of intelligence to undertake the complex operations required of a watch-maker, than to undertake the simple occupation of a pavior; and that however the latter may befuddle himself with beer, he will not disqualify himself for his work so long as he remains competent to lift his rammer and let it fall again; while a trifling dimness of vision or unsteadiness of hand may render the watch-maker totally unable to carry on the delicate manipulations of his craft. Similarly, a far greater alertness, watchfulness, and readiness are required for the more complex employment of driving a carriage and pair through crowded thoroughfares than for driving a team of horses from the tail of a plow; and an error of speed or direction which would be wholly unimportant in the latter case might be ruinous in the former. So with every increase in the complexity of the occupation, the greater is the intelligence that it requires, and the slighter is the derangement that will unfit a person for carrying it on.

The various combinations of these three conditions of precariousness, arduousness, and complexity of occupation may, of course, give rise to very various results, and the results will be the more various since the conditions will in some respects enforce and in other respects counteract each other. A source of livelihood which is precarious, arduous, and complex will be the most disadvantageous to the mental health of the worker; and the combination of precariousness with either of the other elements adds to its risk; but, on the other hand, the more complex the employment, the less will be the special risk of one-sided development arising from

its arduousness, since a complex employment exercises various faculties in various ways.

From the above considerations it will be apparent that, as far as the first group of the conditions of life are concerned, the most favorable position for the bodily and mental health is that of full security; while the daring speculator, whose livelihood is in the highest degree precarious, who lives perpetually on the brink of some immense and sudden vicissitude, whose business occupies and exhausts the whole of his time and energies, and is, at the same time, in the highest degree complex, is placed in conditions that are superlatively unfavorable to the maintenance of complete mental sanity. While it is true that there are men, like Napoleon Bonaparte, so robustly constituted that the simultaneous operation of all these conditions, in their most intensely disastrous form, leaves the intellect clear and the mind unshaken, it is also true that many and many a man enters the portals of a lunatic asylum for having unwisely chosen a career for which his mental strength was insufficient. And the practical conclusion that these conditions teach is that parents, in placing their children, and especially those of unstable nervous temperament, out in the world, should aim, first of all, at finding them a secure position; and for this should be willing to sacrifice much that is more alluring. In seeking security at some cost of wealth, they need not fear that they are doing injustice to possible capabilities of their children, to be hereafter developed, for capacity, as surely as water, finds its own level, and it is better that it should be forced up by the hydraulic pressure of surrounding opinion, whose action, though slow, is irresistible, than that it should shoot up like a jet, only to fall as spray, for want of support.

As for the other two groups of the conditions of life, neither time nor space will allow of their consideration here and now, and the influence of their modifications in the production of insanity must be postponed to a more fitting opportunity.

HOT WATER IN THERAPEUTICS.—Several years ago I learned in my personal experience that no agent relieves nausea and vomiting so satisfactorily and promptly as water, as hot as can be drunk. Since then I have used it in a large number of cases, and it has been uniformly reliable. The following classification may be made of the cases in

which it has been used: 1, Cases in which nausea and vomiting occurred at the outset, or during the course of acute febrile disease; 2, cases in which these symptoms were caused by overloading the stomach when its functions had been impaired by protracted disease; 3, cases in which they were produced by nauseous medicines (not emetics), at the time they were taken; 4, cases of acute gastritis, caused by the ingestion of irritants; 5, cases in which these symptoms were purely reflex; 6, cases of chronic gastritis; 7, cases of colic in newly born infants; 8, cases of flatulent distention of the stomach.—DR. DOUGLAS MORTON.

FOUR CASES OF OPIUM-POISONING.

BY SAMUEL S. WALLIAN, M. D., BLOOMINGDALE, N. Y.

APRIL 3, 1883, four men, J. W. L——, C. C. T——, A. B——, and S. L. P——, jointly drank from a bottle (supposed to contain whisky and quinine) four ounces of tincture of opium (Phar. of 1870). Nearly half an hour elapsed before the nature of the mistake was fully realized.

By this time Dr. Rice and myself were both summoned. He, being nearer, arrived some minutes first, and very soon administered to each a very large dose of sulph. zinc, in solution, to which was added fifteen grains of ipecac. On my arrival he was mixing a second dose of the same, which was promptly swallowed by three of the unfortunates, without effect, save in the case of S. L. P——, who vomited slightly. Advising further efforts at producing emesis by irritating the fauces, etc., I sent for my buggy case, which was at some distance, and after three of the victims had called for and swallowed a third large dose of the zinc and ipecac, I hastily prepared a solution of apomorphia mur.; and, as the impending narcosis was not yet perceptible in any one of the cases, I risked the injection of one-sixth grain subcutaneously into the arms of each. My anxiety lest this drug should also fail to procure emesis, in which case it would necessarily add to the approaching narcosis, was quickly dispelled. Within three minutes emesis was quite free with two, and moderately so with the other two.

Copious draughts of warm mustard and water were supplied, but it was soon evident that no further emetic effects could be secured. It was now 5.30 P. M., the poison having been swallowed not far from four o'clock.

Five grains citrate of *caffea* were exhibited to each of the four, and ambulation resorted to vigorously.

Asking the druggist, from whom the drug had been—without fault of his—procured, to give me, as nearly as possible, the equivalent in morphia received by each patient, which he stated to be $4\frac{7}{8}$ grains, I prepared a solution of atropia gr. j. to \mathfrak{Z} ij., of which I injected, subcutaneously, \mathfrak{M} xij. (= gr. one-twentieth) to each patient.

In case of A. B——, who vomited a little earlier and more freely than the rest, complete narcotism did not ensue, and ambulation was kept up without great effort.

By 7 P. M. I repeated the dose of atropia, gr. one-twentieth. Seeing no apparent effect from the two doses, aggregating one-tenth gr. to each patient, and recalling the antagonistic ratio existing between atropia and morphia, as stated by Bartholow, viz., atropia gr. ss. to morphia, gr. j., I prepared a solution double the strength of the former one or, grs. ij. to \mathfrak{Z} ij. Of this I exhibited \mathfrak{M} xxiv., hypodermically (= gr. one-tenth), to each of the three most under the influence of the narcotic. By this time—7.30—the pupils of the latter were contracted to a mere dot, narcosis was so fully established that they could not be roused by the most vigorous measures, and ambulation was entirely out of the question.

Respirations fell to 8 per minute; the pulses of all became fainter and slower until scarcely perceptible. Having sent for my battery I now applied a strong faradic current, one pole over the diaphragm and one at the nape of the neck. By carefully interrupting the current at regular intervals respiration was gradually restored, but in each case the application had to be repeated as often as every ten minutes. Twice in the cases of J. W. L—— and C. C. T—— respiration was suspended for a space of two minutes each time, and the struggle seemed to the assistants to have become a forlorn hope. Gradually the antagonistic influence of the atropia began to assert itself; the pupils gradually relaxed, and by 9.30 P. M. the respirations were quite regular and $10\frac{1}{2}$ to 11 per minute. The three were now lying in a tranquil sleep, from which, however, they could not be roused by any effort. By 10 P. M. S. L. P—— showed signs of returning consciousness, swallowed some stimulants, and could be momentarily aroused. Pupils of all well dilated; respirations, easy and regular, 11 to 14 per minute pulses, 70 to 95.

We now had all removed to more comfortable quarters, the two more fortunate subjects walking between two assistants.

Warmth was now applied more effectually than before,—in fact, too zealously by some of the excited assistants, as some severe hot-bottle blisters abundantly testify!—but with the exception of occasional sips of brandy and ammonia, with beef-juice, no further treatment was deemed necessary. To the two who were already convalescent, milk and other nourishment were freely allowed.

By 4 A. M. it was evident that all were out of danger.

The effects of the antagonist, atropia, were visible for forty-eight hours or more, as shown by disturbance of vision, unsteady gait, hallucinations, harmless delirium, etc., which would seem to indicate that it was exhibited somewhat in excess of the requirements in the several cases.

Impossible as it was to estimate accurately just how much of the laudanum had been injected by each, and how much ejected by emesis, this result was unavoidable.

I now think it would have sufficed had the third dose been limited to one-tenth or even to one-twentieth gr.; yet Bartholow, as stated, and other good authorities, insist that it requires one-half gr. atropia to antagonize 1 gr. of morphia.

If we assume, on their own and the druggist's subsequent statements, that the two worst cases received the equivalent of five to six grains of morphia each, and also assume that only one-third of this amount was ejected by the delayed and imperfect emesis, about four grains would require to be antagonized in each case. This, according to the authority quoted, would require two grains of atropia. The inference is, that not more than one-tenth gr. and perhaps even one-twentieth gr. of atropia is sufficient to antagonize 1 gr. of morphia.

No doubt the prompt use of apomorphia at a critical moment, the after administration of *caffea*, and the vigorous application of the faradic current, contributed something to the success of the treatment; but it is evident that but for the timely use of atropia all other means would have failed to save life in at least two of the four cases.